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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,071	06/14/2006	Daniel N. Bauer	CH920030035US1	5849

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MICHAEL BUCHENHORNER, P.A.  
8540 SW 83 STREET  
SUITE 100  
MIAMI, FL 33143

EXAMINER
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BENOIT, ESTHER

ART UNIT	PAPER NUMBER
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2442

NOTIFICATION DATE	DELIVERY MODE
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06/23/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

michael@buchenhorner.com  
ana@buchenhorner.com  
AnaBuch@gmail.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,071	<b>Applicant(s)</b> BAUER ET AL.	
	<b>Examiner</b> ESTHER BENOIT	<b>Art Unit</b> 2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1-30 are pending in this application. Claims 1, 3, 23-26, and 28-30 have been amended.

### ***Response to Arguments***

2. Applicant's arguments, filed 03/25/2009, with respect to the rejection of claim(s) 1 under 102(b) have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Rinaldi et al. (*Routing and Data Location in Overlay Peer-to-Peer Networks*, July 2002) ), in view of Guy et al. (*Replica Management in Data Grids*, July 2002)

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-8 and 23-30 are rejected under 35 U.S.C. 102(a) as being anticipated by Rinaldi et al. (*Routing and Data Location in Overlay Peer-to-Peer Networks*, July 2002).

**With respect to claim 1**, Rinaldi discloses:

- selecting at least one replica number by applying a given function, requiring the replica number and a document identifier as input (pg. 23, paragraph 1, “The first mechanism...”)
- determining at least one entity identifier, each entity identifier representing an entity in the network that might provide the replica (pg. 23, paragraph 2, “The replica at n1...”)
- addressing a document related request to at least one of the identified entities (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 2**, Rinaldi discloses selecting  $k = N$  replica numbers, wherein  $N$  is a maximum number for replicas, by applying the given function  $k$  times: determining  $k$  entity identifiers (pg. 20, paragraph 3, “A hash function...”)

**With respect to claim 3**, Rinaldi discloses selecting  $k$  replica numbers from a maximum number of  $N$  replicas with  $k < N$ , by applying the given function  $k$  times, and determining  $k$  entity identifiers (pg. 20, paragraph 3, “A hash function...”)

**With respect to claim 4**, Rinaldi discloses wherein  $k \leq 5$  (pg. 20, paragraph 3, “A hash function...”)

**With respect to claim 5**, Rinaldi discloses wherein  $k = 1$  (pg. 20, paragraph 3, “A hash function...”)

**With respect to claim 6**, Rinaldi discloses addressing the document related request to all identified entities (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 7**, Rinaldi discloses addressing the document related request to only selected ones of the identified entities (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 8**, Rinaldi discloses addressing the document related request only to one entity selected from the identified entities (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 23**, Rinaldi discloses a computer program element comprising computer program code means which, when loaded in a processor unit of a computing entity, configures the processor unit to perform a method as claimed in any one of the preceding claims (pg. 23, paragraph 1, “The first mechanism...”)

**With respect to claim 24**, Rinaldi discloses a computing entity for retrieving a replica of an electronic document in a computer network, comprising a control unit designed to perform a method (pg. 23, paragraph 1, “The first mechanism...”)

**With respect to claim 25**, Rinaldi discloses:

- selecting a replica number by applying a given function, requiring the replica number and a document identifier as input (pg. 23, paragraph 1, “The first mechanism...”)
- determining an entity identifier, the entity identifier representing an entity in the network (pg. 23, paragraph 2, “The replica at n1...”)
- addressing the identified entity for replica depositing purposes (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 26**, Rinaldi discloses a computer program element comprising computer program code means which, when loaded in a processor unit of a computing entity, configures the processor unit to perform a method (pg. 23, paragraph 1, “The first mechanism...”)

**With respect to claim 27**, Rinaldi discloses a computing entity for depositing a replica of an electronic document in a computer network, comprising a control unit designed to perform a method (pg. 23, paragraph 1, “The first mechanism...”)

**With respect to claim 28**, Rinaldi discloses an article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing retrieval of a replica of an electronic document in a computer network, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps (pg. 23, paragraph 1, “The first mechanism...”)

**With respect to claim 29**, Rinaldi discloses:

- selecting to select at least one replica number (pg. 23, paragraph 1, “The first mechanism...”)
- applying to apply a given function employing the replica number and a document identifier as input (pg. 23, paragraph 1, “The first mechanism...”)
- determining at least one entity identifier, each entity identifier representing an entity in the network that might provide the replica (pg. 23, paragraph 2, “The replica at n1...”)

- addressing to address a document related request to at least one of the identified entities (pg. 23, paragraph 2, “The replica at n1...”)

**With respect to claim 30**, Rinaldi discloses a computer program product comprising a physical computer readable medium having computer readable program code means embodied therein for causing retrieval of a replica of an electronic document in a computer network, the computer readable program code means in said computer program product for causing a computer to effect the functions (pg. 23, paragraph 1, “The first mechanism...”)

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinaldi et al. (*Routing and Data Location in Overlay Peer-to-Peer Networks*, July 2002), in view of Guy et al. (*Replica Management in Data Grids*, July 2002)

**With respect to claim 9**, Rinaldi does not explicitly disclose calculating a cost function for each of the k entities, the cost function providing a cost value as result which indicates a cost to address the relevant entity.

However, Guy discloses calculating a cost function for each of the  $k$  entities, the cost function providing a cost value as result which indicates a cost to address the relevant entity (pg. 13, "Use case: Replicate...", "t-t3...")

Therefore, it would have been obvious for one skilled in the art to combine the teachings of Rinaldi with the teachings of Guy to calculate a cost function for each replica retrieved, because it will allow the system to estimate a time needed to access a given replica and allow optimization of the system.

**With respect to claim 10**, Rinaldi does not explicitly disclose calculating a cost function for each of the  $k$  entities, the cost function providing a cost value as result which indicates a cost to address the relevant entity, wherein each entity to be addressed is selected from the identified entities due to an associated cost value

However, Guy discloses calculating a cost function for each of the  $k$  entities, the cost function providing a cost value as result which indicates a cost to address the relevant entity, wherein each entity to be addressed is selected from the identified entities due to an associated cost value (pg. 13, "Use case: Replicate...", "t-t3...")

Therefore, it would have been obvious for one skilled in the art to combine the teachings of Rinaldi with the teachings of Guy to calculate a cost function for each replica retrieved, because it will allow the system to estimate a time needed to access a given replica and allow optimization of the system.

**With respect to claims 11-13**, the claims are rejected for the same reasons as claim 10 above. Please see rejection of claim 10.



**With respect to claim 14**, Rinaldi does not explicitly disclose wherein upon receiving a "replica not available" response from each of the addressed entities, another entity is selected from the identified entities for addressing the document related request

However, Guy discloses receiving a "replica not available" response from each of the addressed entities, another entity is selected from the identified entities for addressing the document related request (pg. 13, paragraph 4, "Figure 3 shows a sequence...", bullets 1-3)

Therefore, it would have been obvious for one skilled in the art to combine the teachings of Rinaldi with the teachings of Guy to select another entity when a replica is not available, because it will allow the system to satisfy the task requested and reduce unnecessary use of bandwidth on constant retries and failures.

**With respect to claims 15-21**, the claims are rejected for the same reasons as claim 14 above. Please see rejection of claim 14.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esther Benoit whose telephone number is 571-270-3807. The examiner can normally be reached on Monday through Friday between 7:30 a.m and 5 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

E.B

June 15, 2009

/Andrew Caldwell/

Supervisory Patent Examiner, Art Unit 2442